

# Asthma Data

From the Washington State Behavioral Risk Factor Surveillance System | 2011 – 2016

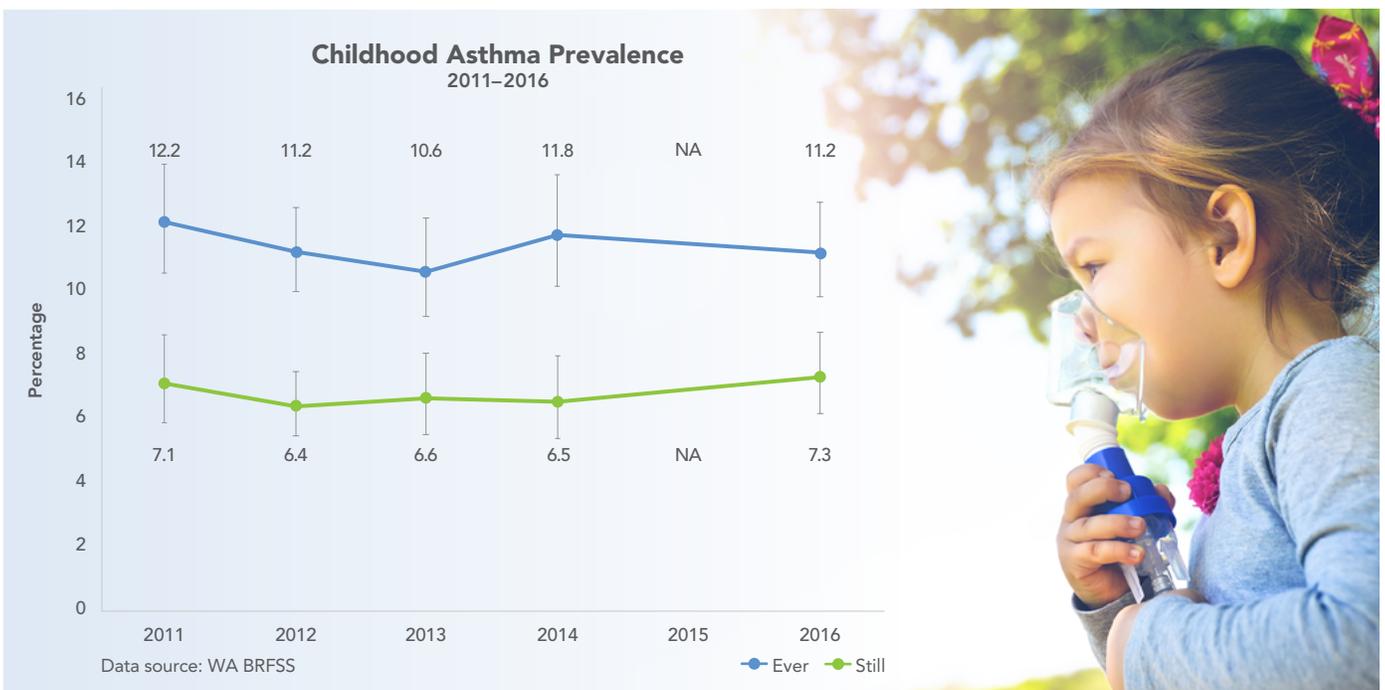
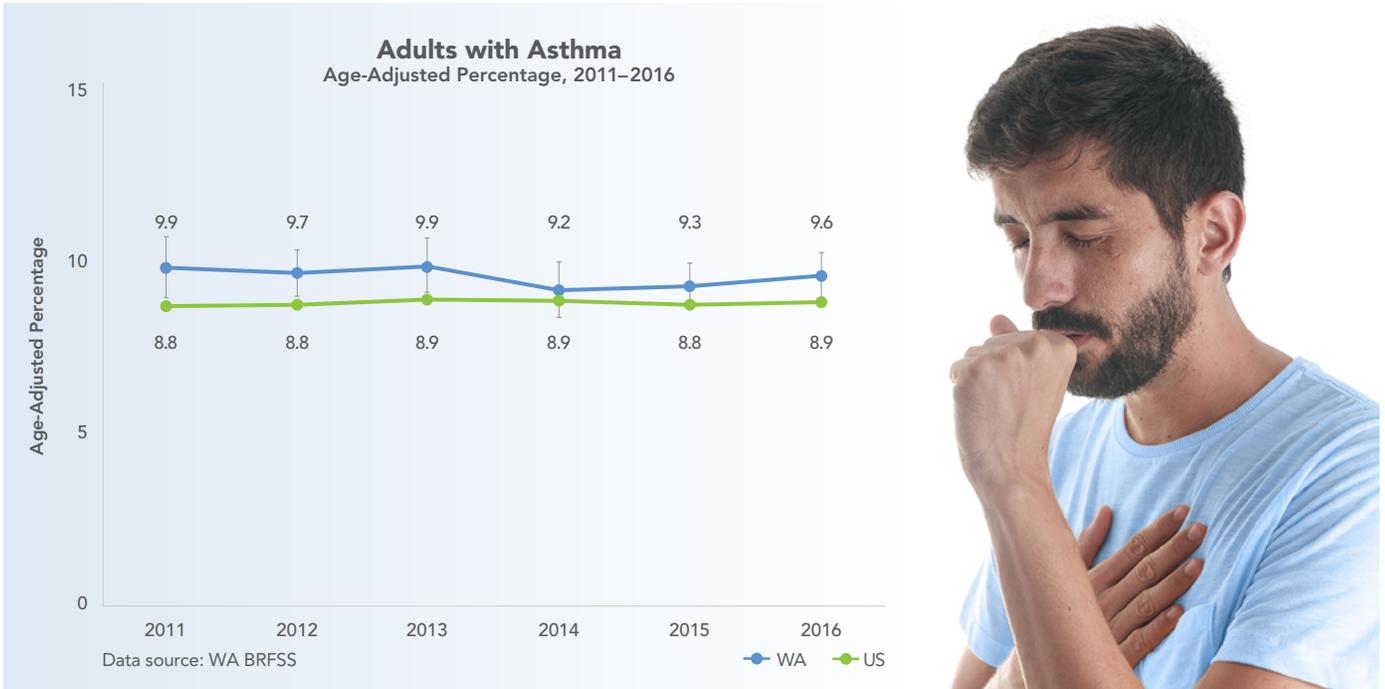


## Asthma in Washington

Asthma is a chronic respiratory condition. It is a common but complex disorder of the airways. Asthma causes the lungs to swell and narrow, leading to wheezing, shortness of breath, chest tightness, and coughing.<sup>1</sup> Asthma can range from a persistent wheeze or cough to a severe, progressive and sometimes fatal disease. In most cases, it is difficult to know what causes asthma to develop. Currently there is no cure for asthma.

According to the U.S. Centers for Disease Control and Prevention (CDC), Washington’s asthma prevalence is approximately the 23<sup>rd</sup> highest in the nation.<sup>2</sup>

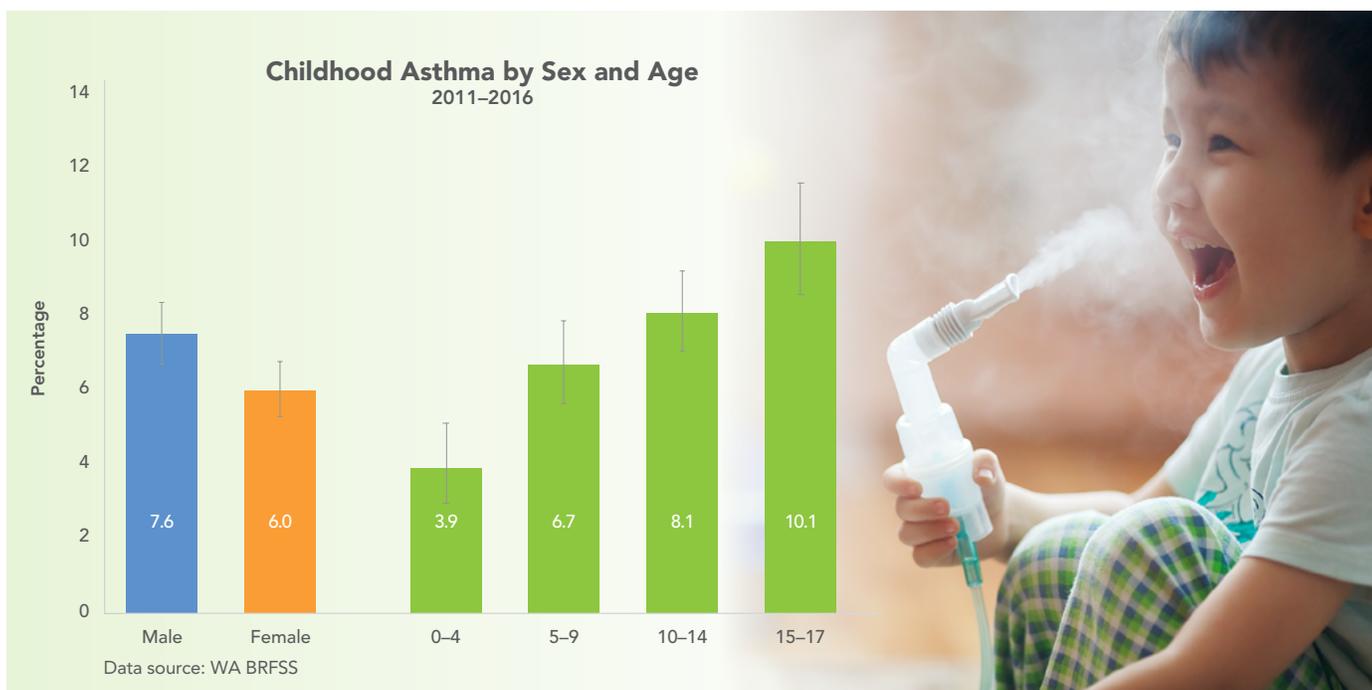
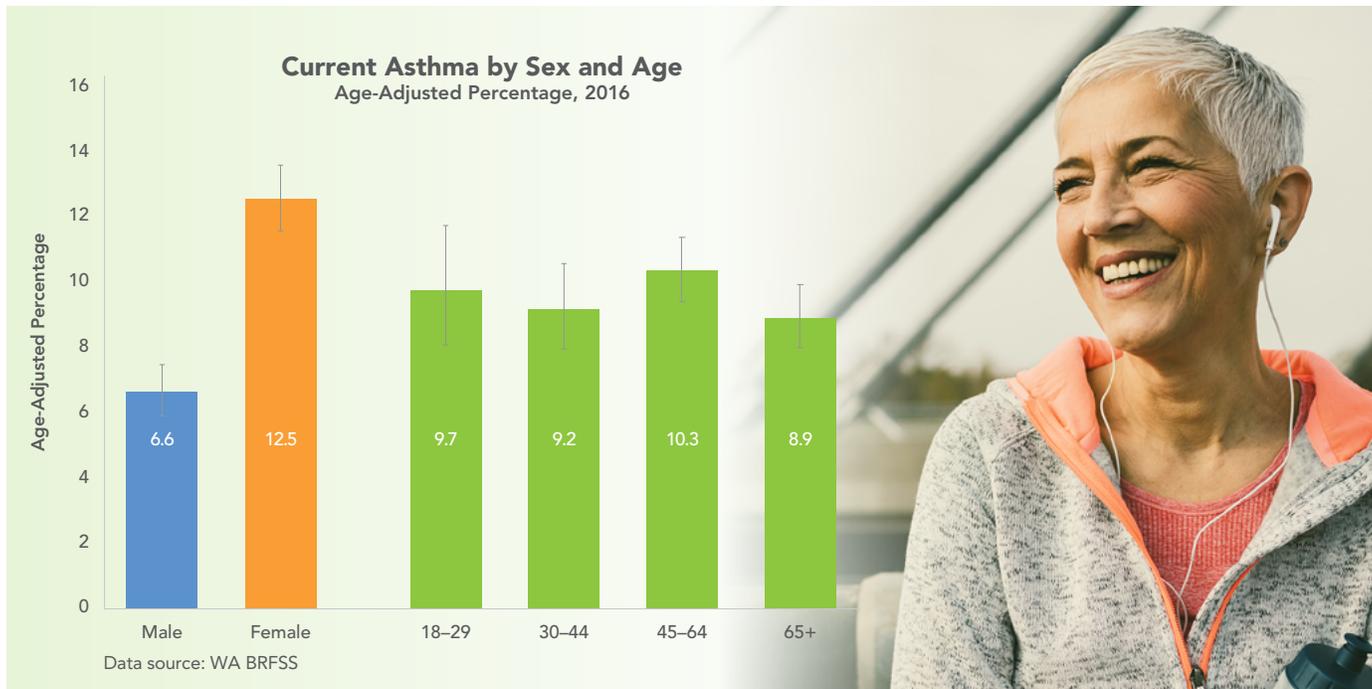
- More than half a million adults and 120,000 youth in Washington currently have asthma.
- About 1 in 8 women and 1 in 14 men currently have asthma.
- Between 8 and 11 percent of youth have ever had asthma.



## Gender

Adult females are more likely to have asthma than adult males. This is true across all adult age groups in Washington state.<sup>3</sup> Research suggests that, among many other factors, hormonal changes and genetic susceptibility both contribute to the change in prevalence between males and females that occurs about the time of puberty.<sup>4</sup> In the U.S., women have a 10.5 percent greater chance of developing asthma than men.<sup>5</sup>

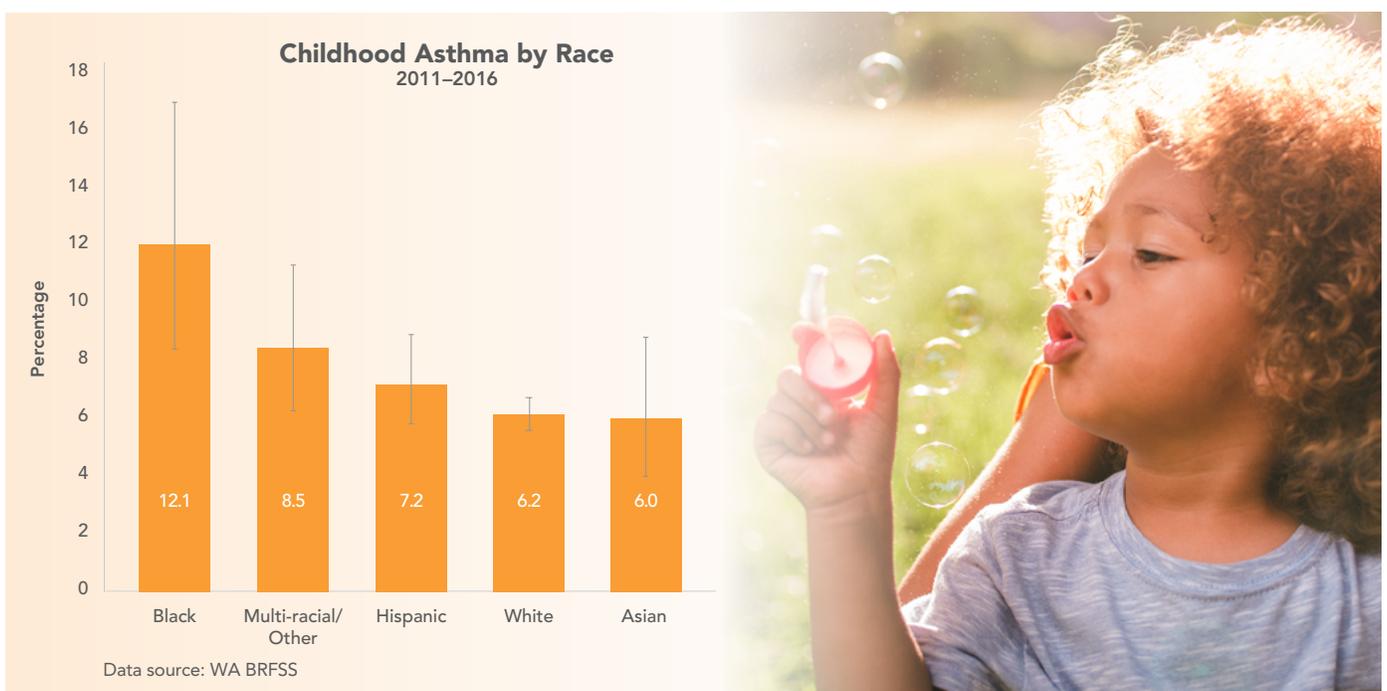
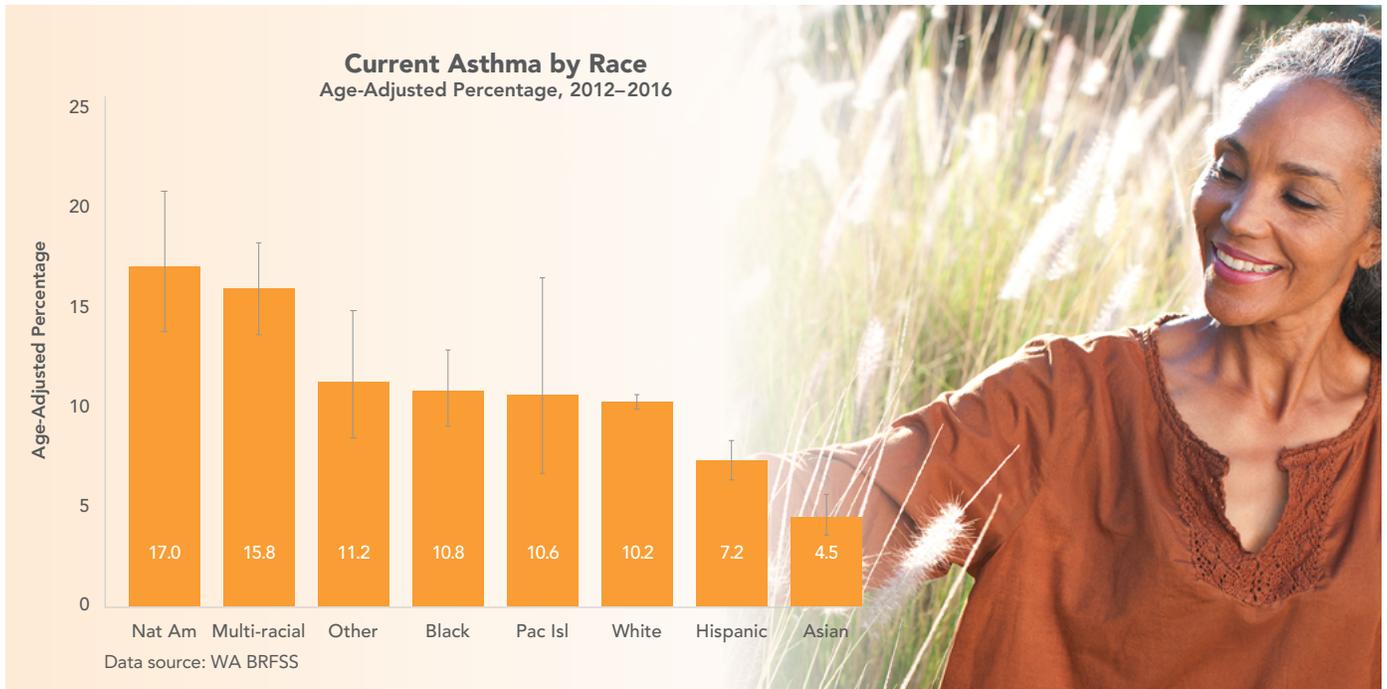
Adult-onset asthma is more likely to develop among people with allergies that affect the airways or people exposed to environmental irritants such as tobacco smoke, mold, dust mites, animal dander, and perfume. Certain viruses or illnesses such as cold or flu may also increase the likelihood of adult-onset asthma.



## Race

Disparities in asthma prevalence exist among racial and ethnic groups in Washington state. These differences are complex. Genetic differences alone do not explain them. In Washington state, non-Hispanic American Indian and Alaska Native adults, and black children report higher asthma rates than other racial or ethnic groups. Asian, white, and Hispanic adults and children report lower asthma rates than other groups.

Researchers cannot explain some of the considerable racial/ethnic differences in asthma-related problems. Among African Americans and American Indian/Alaska Natives, socioeconomic status and air quality account for much of the observed disparity when compared to whites.<sup>6</sup> Factors associated with poverty such as lack of access to specialized health care, exposure to stress, and violence may also contribute to asthma.<sup>7</sup>



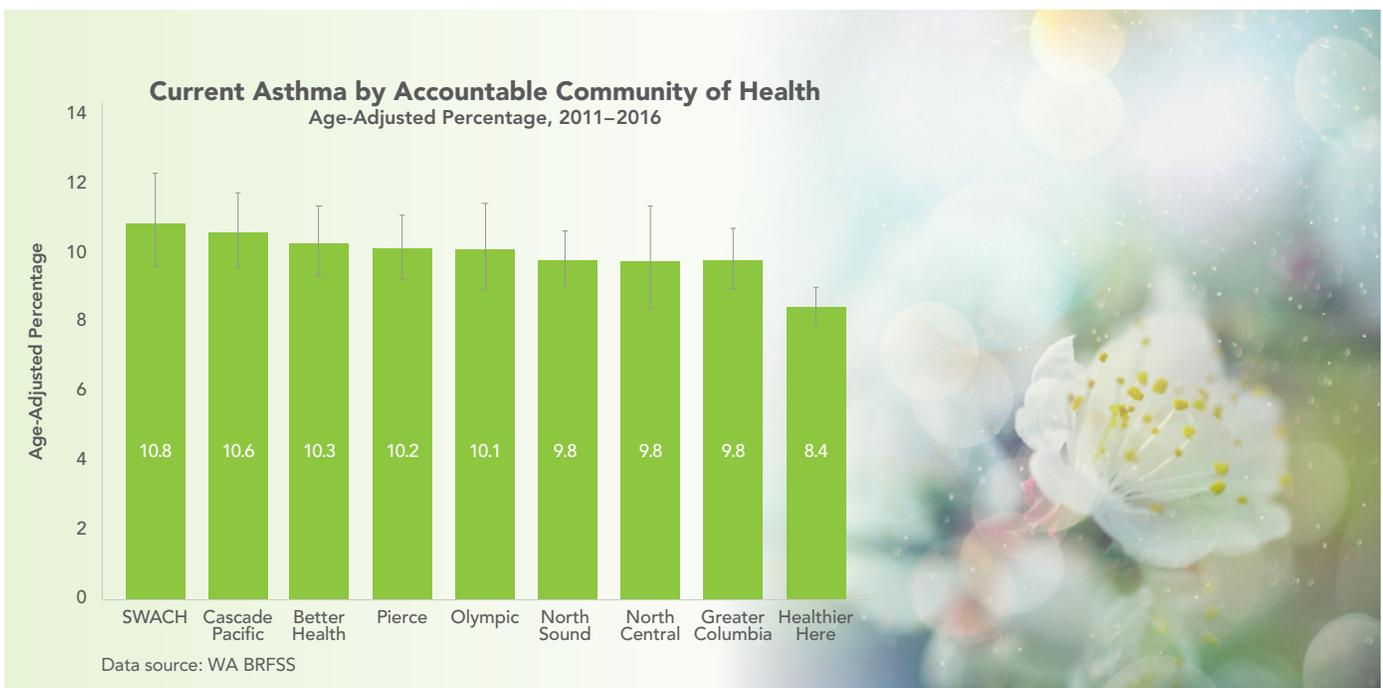
## Income

There is a strong connection between current asthma and income. Washingtonians living in a household with an annual income of less than \$10,000 are more likely to report having asthma than all other income levels. People in the lowest income category are more than twice as likely to report asthma when compared to people with household incomes of \$75,000 or more per year.



## Accountable Communities of Health

Asthma prevalence is consistent across all Accountable Communities of Health (ACHs), except the HealthierHere ACH region, which has significantly lower reported prevalence than all other ACHs. This may be related to higher socio-economic conditions in the HealthierHere ACH region compared to the rest of the state.



## Addressing Asthma in Washington State

The goals of the Accountable Communities of Health (ACHs) are to promote health equity throughout the state; create, support, and collaborate on local health improvement plans; support local and statewide initiatives; and align resources and activities that improve whole-person health and wellness. Eight out of the nine ACHs have chosen asthma as one of their chronic disease prevention and control areas of focus.<sup>8</sup>



### BRFSS Data

The Washington State Department of Health helps residents stay healthy. In order to gather the information needed to do that, the Department partners with the Centers for Disease Control and Prevention (CDC) to conduct the Behavioral Risk Factor Surveillance System (BRFSS). The yearly survey measures changes in the health of people in our state, and is an important source of health-related data. The BRFSS questions related to asthma are: "Have you ever been told you have asthma?" and if yes, "Do you still have asthma?"

### Citations

- 1 Busse, P. Asthma: Bronchial Asthma. A.D.A.M Medical Encyclopedia. Accessed August 22, 2018. Available online at <http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0001196/>.
- 2 Centers for Disease Control and Prevention. Most Recent Asthma Data by State or Territory. Accessed August 22, 2018. [https://www.cdc.gov/asthma/most\\_recent\\_data\\_states.htm](https://www.cdc.gov/asthma/most_recent_data_states.htm).
- 3 Washington State Department of Health, "The Burden of Asthma in Washington State: 2013 Update." Accessed August 22, 2018. <http://www.doh.wa.gov/Portals/1/Documents/Pubs/345-240AsthmaBurdenRept13.pdf>.
- 4 ScienceDirect, "Gender Differences in Asthma Development and Progression." Accessed August 22, 2018. <https://www.sciencedirect.com/science/article/pii/S1550857907800544?via%3Dihub>.
- 5 Kynk, Jessica, John Mastronarde, and Jennifer McCallister. "Asthma, the Sex Difference." *Current Opinion in Pulmonary Medicine*. no. 1 (2011): 6-11. Accessed January 31, 2014. [http://journals.lww.com/co-pulmonarymedicine/Abstract/2011/01000/Asthma,\\_the\\_sex\\_difference.3.aspx](http://journals.lww.com/co-pulmonarymedicine/Abstract/2011/01000/Asthma,_the_sex_difference.3.aspx)
- 6 New Pittsburgh Courier, "Racial differences in asthma are shocking." December 19, 2012. Accessed August 22, 2018. <http://newpittsburghcourieronline.com/2012/12/19/racial-differences-in-asthma-are-shocking/>
- 7 Gorman, BK, and M Chu. "Racial and ethnic differences in adult asthma prevalence, problems, and medical care." *Ethnicity & Health*. no. 5 (2009): 527-52. Accessed August 22, 2018. <http://www.ncbi.nlm.nih.gov/pubmed/19533477>
- 8 Washington State Health Care Authority, ACH submitted documents. Accessed August 22, 2018. <https://www.hca.wa.gov/about-hca/healthier-washington/ach-submitted-documents>